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Appl. No.: 10/540,351

**AMENDMENTS TO THE SPECIFICATION WITH MARKINGS TO SHOW  
CHANGES MADE**

Change the title to read --SPRAY CAN--.

Before paragraph [0001], add the heading --BACKGROUND OF THE INVENTION--.

Amend paragraph [0001] as follows:

[0001] — The invention relates to a spray can which is ergonomically designed in order to ensure a secure hold of the can when spraying and ~~is of the type specified in the preamble of claim 1~~, to a device which is used for manufacturing the spray can and ~~is of the type specified in the preamble of claim 11~~, and to a method which is carried out to manufacture the spray can with said device ~~and is of the type specified in the preamble of claim 13~~.

Before paragraph [0006], add the heading --SUMMARY OF THE INVENTION--.

Amend the following paragraphs:

[0006] — The object of the invention is therefore, in the first instance, to develop an easy-to-handle spray can which ~~is of the type specified in the preamble of claim 1~~, is ergonomically shaped, and yet presents no disadvantage in terms of safety. According to the invention, this is achieved by ~~the measures which are set forth in the characterizing part of claim 1 and which have a spray can made of metal, with a lower can portion and an upper can portion, wherein the lower can portion contains a bottom and is of almost cylindrical configuration, so that a cross section of the spray can in this portion is circular, and wherein the upper can portion is provided with a shoulder area and with a can opening with a collar for an insertable spraying system, wherein the upper can portion additionally contains a shaping area, which may also extend above the shoulder area, and a cross section of the shaping area of the spray can is configured~~

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differently than the almost circular cross section of the lower can portion. The spray can of the present invention has the following particular significance.--.

**[0009]** --It is a further object of the invention to provide a device of the aforementioned type which is such that the spray can is able to be manufactured without any substantial changes in a conventional but modified production operation. According to the invention, this is achieved by ~~the measures which are set forth in the characterizing part of claim 11 and to which the following particular significance is attached~~ a device for manufacturing a spray can, including one or more dies for producing the upper can portion with the shoulder area and with the can opening with collar from an almost cylindrical hollow body with bottom, with the shape of the upper can portion being determined by the contours of the dies, wherein the contours of the dies are configured in such a way that in addition the differently configured shaping area of the spray can can also be formed, with the circumferences of the contours being non-circular at different cross sections in the shaping area of a die.--.

**[0011]** -- It is likewise an object of the invention to develop a modified method of the aforementioned type which permits economic manufacture of the spray cans according to the invention in large batch numbers. This is achieved essentially ~~through the modified method step in the characterizing part of claim 43 by a method for manufacturing a spray can, including the steps of~~ a) producing an almost cylindrical hollow body with bottom, b) painting the inside of the cylindrical hollow body, c) printing or painting the cylindrical hollow body on the outside, d) cutting off the upper edge of the cylindrical hollow body for exact forming of the collar of the can opening, e) producing the upper can portion with the shoulder area and with the can opening with collar, wherein the process step e) includes for the upper can portion with the shoulder area and with the can opening with collar, the device as set forth above, by which means the differently configured shaping area of the upper can portion can also be formed.--.

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[0012] -- In this modified method step, the upper can portion with the shoulder area and with the can opening with collar and the additional shaping area is formed by the device as claimed in claim 11 or 12 set forth above. Thus, in the method, no additional production operation is employed compared to conventional production methods instead the spray cans 10 according to the invention are manufactured by the changed or modified production operation. Thus, the known production method for the conventional spray cans (from the prior art) is largely retained so as to affect the optimized sequence as little as possible. In this way, the spray cans according to the invention can also be manufactured in an economical manner.--.

Before paragraph [0014], add the heading --BRIEF DESCRIPTION OF THE DRAWING--.

Before paragraph [0025], add the heading --DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS--.

Amend the following paragraphs:

[0028] -- In Figures Figs. 1 to 3, a spray can 10 is shown which has oval cross sections in the shaping area 17 of the spray can 10. The V-shaped configuration of the spray can 10 can be seen from Fig. 1. This upwardly widening shape of the spray can 10 guarantees ergonomic handling of the spray can 10. In this way, slipping of the spray can 10 during its use, particularly when actuating the spraying system with slippery fingers, is greatly reduced. As can further be seen from Figures Figs. 1 to 3, the lower can portion 11 has a constant circular cross section. In this area of the lower can portion 11, the spray can 10 is gripped by a clamping device 23, in a production operation described in more detail below.--.

[0037] --This production operation, however, consists of individual production steps, as are indicated in Figures Figs. 6.1 and 6.2. In a first step, a cylindrical hollow body 25a with bottom 12 is fitted into a clamping device 23 on

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the rotatable clamp plate 21 of the device 20. Thereafter, the displaceable die plate 22, with the dies 24 secured on it, moves towards the clamp plate 21 (see arrow 27). This is the first production step for the formation of the upper can portion 13 for manufacturing the spray can 10. In this way, the shape of the cylindrical hollow body 25a is converted to the shape of the cylindrical hollow body 25b. After the die plate 22 has moved back to its starting position, the clamp plate 21 rotates in the direction of rotation 26 through a defined angle. A new cylindrical hollow body 25a is then clamped on the clamp plate 21, and the already described production step begins anew. Now, however, not only is the cylindrical hollow body 25a shaped, but also the already created cylindrical hollow body 25b is further shaped by again moving the die plate 22 with the applied dies 24 to the clamp plate 21. By means of this second production step, which however is similar to the first one, the cylindrical hollow body 25b is formed into the cylindrical hollow body 25c by the die 24b. Once the die plate 22 is in its starting position, the clamp plate 21 is again turned in steps in the direction of rotation 26, and the production step starts anew. Since up to 35 cylindrical hollow bodies 25 can be mounted on the clamp plate 21, this production operation can also consist of a total of 35 forming steps for the spray can 10. By means of this stepwise forming of the cylindrical hollow bodies 25, a finished spray can 10 is provided at the end. As has already been made clear, the device 20 consequently also contains the rotatable clamp plate 21 with the clamping devices 23 and the displaceable die plate 22 with the recesses for the dies 24.—.

[0039] — Figures Figs. 4.1 and 4.2 show a first die 24a which is mounted on the device 20, in particular on a displaceable die plate 22. In Fig. 4.1, this die 24a is shown as a longitudinal section through a front view, thus making clear the contour 30a. This die 24a serves for the first forming step of the cylindrical hollow body 25a. It will be clearly seen from Figures Figs. 4.1 and 4.2 that the contour 30a in the downwardly open passage has an oval cross section (see different diameter in the shaping area 17). This cross section narrows toward the top and becomes circular for the can opening 15. Figures Figs. 5.1 to 5.3 show a second

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die which is used for the second production step for the cylindrical hollow body 25b. As can be seen from Figures Figs. 5.1 and 5.2, the collar 16 is partially formed on the can opening 15 with this die 24b. The circumference 31b of the contour 30b in the cross section V.3 – V.3 can be clearly seen from Fig. 5.3. This circumference 31b of the contour 30b is of oval configuration.--

Page 14, delete completely.

Page 15, after the heading "PATENT CLAIMS" and before the first claim add  
–What is claimed is:--.